

# The Hyaluronidase of Choice

#1 prescribed\*

**Preservative-free** 

Over 1 million vials sold

Used by 7 out of the top 10 hospitals for adult ophthalmology†

On all major GPO contracts

Made in the USA in cGMP-compliant facility

**Consistently available** 

36-month shelf life

Supplied in a convenient 4-pack

Latex-free

Supported by a dedicated sales team

Hylenex recombinant is available through Henry Schein Order #2480064

### About Hylenex® recombinant (hyaluronidase human injection)

#### **Indication:**

Hylenex recombinant is an endoalycosidase indicated as an adjuvant to increase the dispersion and absorption of other injected drugs.

## **Important Safety Information:**

#### **Contraindications**

Hylenex recombinant is contraindicated in patients with known hypersensitivity to hyaluronidase or any of the excipients in Hylenex recombinant. Discontinue Hylenex recombinant if sensitization occurs.

#### **Warnings and Precautions**

Spread of Localized Infection: Hyaluronidase should not be injected into or around an infected or acutely inflamed area because of the danger of spreading a localized infection. Ocular Damage: Hyaluronidase should not be applied directly to the cornea. It is not for topical use.

#### **Adverse Reactions**

Allergic reactions have been reported in less than 0.1% of patients receiving hyaluronidase. Anaphylactic-like reactions following retrobulbar block or intravenous injections have occurred, rarely. The most frequently reported adverse reactions have been mild local injection site reactions, such as erythema and pain. Hyaluronidase has been reported to enhance the adverse reactions associated with co-administered drug products.

#### **Drug Interactions**

Furosemide, the benzodiazepines, products containing sodium metabisulfite (e.g. in local anesthetic products containing epinephrine) and phenytoin are incompatible with hyaluronidase. Hyaluronidase should not be used to enhance the dispersion and absorption of dopamine and/or alpha agonist drugs.

When used with local anesthetics, hyaluronidase hastens the onset of analoesia and shortens its duration of effect, and increases the incidence of systemic reactions. Patients receiving large doses of salicylates, cortisone, ACTH, estrogens or antihistamines may require larger amounts of hyaluronidase for equivalent dispersing effect. Available by prescription only.

Please see the accompanying Brief Summary of Hylenex recombinant on the following page. For the Full Prescribing Information, please visit www.hylenex.com.

- \* Monthly hyaluronidase market share based on Non-Retail Sales Drua Distribution Data from IMS Health (May 2013-December 2016).
- † According to U.S. News and World Report "Best Hospitals" rankings, 2016-2017. Published August 2, 2016.





#### **HYLENEX** recombinant

(hyaluronidase human injection) 150 USP units/mL Rx Only

## BRIEF SUMMARY OF FULL PRESCRIBING INFORMATION

This Brief Summary does not include all the information needed to use HYLENEX recombinant safely and effectively. See full prescribing information for HYLENEX recombinant by visiting www.hylenex.com.

To report SUSPECTED ADVERSE REACTIONS, contact Halozyme Therapeutics, Inc. at 1-877-877-1679 or FDA at 1-800-FDA-1088 or www.fda.gov/medwatch.

### INDICATIONS AND USAGE

#### Subcutaneous Fluid Administration

HYLENEX recombinant is an endoglycosidase indicated as an adjuvant in subcutaneous fluid administration for achieving hydration. When solutions devoid of inorganic electrolytes are administered subcutaneously, hypovolemia may occur. This may be prevented by using solutions containing adequate amounts of inorganic electrolytes and/or controlling the volume and speed of administration.

**Dispersion and Absorption of Injected Drugs**HYLENEX recombinant is an endoglycosidase indicated as an adjuvant to increase the dispersion and absorption of other injected drugs.

#### **Subcutaneous Urography**

HYLENEX recombinant is an endoglycosidase indicated as an adjunct in subcutaneous urography for improving resorption of radiopaque agents.

#### CONTRAINDICATIONS

HYLENEX recombinant is contraindicated in patients with known hypersensitivity to hyaluronidase or any of the excipients in HYLENEX recombinant. A preliminary skin test for hypersensitivity to HYLENEX recombinant can be performed. The skin test is made by an intradermal injection of approximately 0.02 mL (3 Units) of a 150 Unit/mL solution. A positive reaction consists of a wheal with pseudopods appearing within 5 minutes and persisting for 20 to 30 minutes and accompanied by localized itching. Transient vasodilation at the site of the test, i.e., erythema, is not a positive reaction. Discontinue HYLENEX recombinant if sensitization occurs.

#### WARNINGS AND PRECAUTIONS Spread of Localized Infection

Hyaluronidase should not be injected into or around an infected or acutely inflamed area because of the danger of spreading a localized infection. Hyaluronidase should not be used to reduce the swelling of bites or stings.

#### Bites or stings

Hyaluronidase should not be used to reduce the swelling of bites or stings.

### Ocular Damage

Hyaluronidase should not be applied directly to the cornea. It is not for topical use.

Enzyme Inactivation with Intravenous Administration HYLENEX recombinant should not be

administered intravenously. Its effects relative to dispersion and absorption of other drugs are not produced when it is administered intravenously because the enzyme is rapidly inactivated.

#### ADVERSE REACTIONS

The following adverse reactions have been identified during post-approval use of hyaluronidase products. Because these reactions are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure.

The most frequently reported adverse reactions have been mild local injection site reactions such as erythema and pain. Hyaluronidase has been reported to enhance the adverse reactions associated with co-administered drug products. Edema has been reported most frequently in association with subcutaneous fluid administration. Allergic reactions (urticaria or angioedema) have been reported in less than 0.1% of patients receiving hyaluronidase. Anaphylactic-like reactions following retrobulbar block or intravenous injections have occurred, rarely.

When solutions devoid of inorganic electrolytes are administered subcutaneously, hypovolemia may occur. As with all parenteral fluid therapy, observe effect closely, with the same precautions for restoring fluid and electrolyte balance as in intravenous injections.

#### **DRUG INTERACTIONS**

It is recommended that appropriate references be consulted regarding physical or chemical incompatibilities before adding HYLENEX recombinant to a solution containing another drug.

Furosemide, the benzodiazepines, products containing sodium metabisulfite (e.g., in local anesthetic products containing epinephrine) and phenytoin have been found to be incompatible with hyaluronidase.

#### **Drug-Specific Precautions**

Hyaluronidase should not be used to enhance the dispersion and absorption of dopamine and/or alpha agonist drugs.

#### **Local Anesthetics**

When hyaluronidase is added to a local anesthetic agent, it hastens the onset of analgesia and tends to reduce the swelling caused by local infiltration, but the wider spread of the local anesthetic solution increases its absorption; this shortens its duration of action and tends to increase the incidence of systemic reaction.

## Salicylates, Cortisone, ACTH, Estrogens and Antihistamines

Patients receiving large doses of salicylates, cortisone, ACTH, estrogens or antihistamines may require larger amounts of hyaluronidase for equivalent dispersing effect, since these drugs apparently render tissues partly resistant to the action of hyaluronidase.

## USE IN SPECIFIC POPULATIONS Pregnancy

Pregnancy Category C. In an embryo-fetal study, mice have been dosed daily by subcutaneous injection with recombinant human hyaluronidase at dose levels up to 2,200,000 U/kg. The study found no evidence of teratogenicity. Reduced fetal weight and increased

numbers of fetal resorptions were observed, with no effects found at a daily dose of 360,000 U/kg, which represents several orders of magnitude over the

suggested human dose range of 50-300 U of HYLENEX recombinant (0.8-5 U/kg in a 60 kg subject). In a pre- and postnatal development study, mice have been dosed daily by subcutaneous injection with recombinant human hyaluronidase at dose levels up to 1,100,000 U/kg. The study found no adverse effects on sexual maturation, learning and memory of offspring, or their ability to produce another generation of offspring. It is also not known whether HYLENEX recombinant can cause fetal harm when administered to a pregnant woman. HYLENEX recombinant should be given to a pregnant woman only if clearly needed.

#### **Labor and Delivery**

Administration of hyaluronidase during labor was reported to cause no complications: no increase in blood loss or differences in cervical trauma were observed.

#### **Nursing Mothers**

It is not known whether hyaluronidase is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when hyaluronidase is administered to a nursing woman.

#### Pediatric Use

Clinical hydration requirements for children can be achieved through administration of subcutaneous fluids facilitated with HYLENEX recombinant. The dosage of subcutaneous fluids administered is dependent upon the age, weight, and clinical condition of the patient as well as laboratory determinations. It is recommended that in patients with mild to moderate dehydration, only isoosmolar/isotonic fluids, such as normal saline or lactated Ringer's, be delivered via Hylenex recombinantfacilitated subcutaneous (SC) infusions. The potential for chemical or physical incompatibilities should be kept in mind. The rate and volume of subcutaneous fluid administration should not exceed those employed for intravenous infusion. For premature infants or during the neonatal period, the daily dosage should not exceed 25 mL/kg of body weight, and the rate of administration should not be greater than 2 mL per minute. During subcutaneous fluid administration, special care must be taken in pediatric patients to avoid over hydration by controlling the rate and total volume of the infusion.

#### Geriatric Use

No overall differences in safety or effectiveness have been observed between elderly and younger adult patients.



Halozyme and Hylenex are registered trademarks of Halozyme, Inc. U.S. Patent No. 7,767,429

Manufactured for and Marketed by: Halozyme Therapeutics, Inc. San Diego, CA 92121 For Product Inquiry: 1-855-495-3639 Brief Summary MPACP-102-00017